Manitoba Monthly Communicable Disease Report
Reported up to August 31, 2009

Highlights:

1. **Antimicrobial Resistant Organisms**
   Together Methicillin-resistant *Staphylococcus aureus* (MRSA) and *Clostridium difficile* (*C. difficile*) accounted for 66% of all non-STI/HIV related communicable diseases reported to Manitoba Health and Healthy Living during August 2009.

2. **Sexually Transmitted Infections (STI) & Blood-Borne Pathogens (BBP)**
   There were 517 reported cases of sexually transmitted infections (chlamydia, gonorrhoea, and syphilis) in August 2009:
   - 431 reported cases of chlamydia (Ct) only
   - 47 reported cases of gonorrhoea (GC) only
   - 36 reported co-infections of Ct and GC and
   - 3 reported cases of syphilis

   Chlamydia has the highest incidence of reported STI. Females between the ages of 15 and 24 years comprised 46% of all reported chlamydia cases in the province.

   In August 2009, there were no cases of Hepatitis B virus (HBV), 27 cases of Hepatitis C virus (HCV) and 11 cases of HIV newly reported in Manitoba.

3. **Other Communicable Diseases**
The number of reported cases in August 2009 was within the statistically expected range for these reported communicable diseases with the exception of the following diseases:

   - Bacillus Cereus – 3 positive lab confirmed cases reported; less than 2 expected in an average month.
   - Streptococcus Pneumoniae, Other Site – 4 positive lab confirmed cases reported; less than 2 expected in an average month.
   - Salmonella – 27 positive lab confirmed cases reported; less than 25 expected in an average month.

   The expected number of cases and range is statistically based on the number of reported cases during July, August and September, 2004-2008.

Explanatory Notes:

General:
Each monthly communicable disease report includes the number of cases of notifiable communicable diseases reported by lab or health provider during each individual month.

Data for the monthly summary are aggregated based on the earliest of: symptom onset date, specimen collection date, or report date. For the majority of cases, the date used will be the specimen collection date. Some discrepancy of numbers may be based on reporting delays.

The observed numbers of cases are compared to the statistically expected range for each reportable communicable disease. This involves comparing the current month's case counts to the average case counts for the same month, one month subsequent and one month prior for the previous five years. These same months over the five years are used to determine the expected range of cases using the statistical calculation of standard deviation. Using this specific monthly pattern allows for adjustment within the statistics for both seasonality and cyclical disease patterns.

The year-to-date case counts are based on the calendar year.

The disease data reported in the monthly report has not been analyzed for severity or associated deaths at this time.

Disease specific information:

Methicillin-resistant *Staphylococcus aureus* (MRSA) positive results within Manitoba include both individuals who are symptomatic of infection and colonized individuals who have no symptoms and are mostly diagnosed during admission screening activities at facilities. If facilities increase their screening activities, it would usually result in a rise in colonized MRSA cases.

A new case of Hepatitis C Virus (HCV) infection is defined as a first positive test for an identifiable individual.

A new case of Human Immunodeficiency Virus (HIV) infection is defined as a positive test with a unique code that has not been previously linked to a positive test result in Manitoba. Positive HIV tests included in this month's statistics include both nominal and non-nominal testing results.

SUMMARY OF COMMUNICABLE DISEASE FOR August 2009

		MONTHLY TOTAL				YEAR-TO-DATE	
ICD9	DISEASE/INFECTION	2008	2009	Expected*	Ex. Range**	2008	2009
006.9	AMEBIASIS	2	2	2	0-4	25	26
022	ANTHRAX				***		
127.0	ASCARIASIS			0	0-1		
005.8	B. CEREUS		3	0	0-1	1	5
320.1	BAC. MENINGITIS - PNEUM			0	0-1	1	3
320.7	BAC.MENINGITIS-LISTERIA				***		
038.0	BETA STREP SEPTICEMIA	17	17		***	86	112
116.0	BLASTOMYCOSIS	1			***	8	4
005.1	BOTULISM				***		
023	BRUCELLOSIS			0	0-1		1
005.2	C. PERFRINGENS			1	0-3		2
008.43	CAMPYLOBACTER	26	23	28	18-38	144	151
558.2	CLOSTRIDIUM DIFFICILE	73	53		***	582	561
046.1	CREUTZFELD-JACOB DISEASE				***	1	2
007.8	CRYPTOSPORIDIOSIS	23	5	9	0-26	33	16
061.0	DENGUE FEVER			0	0-0	1	
065.4	DENGUE HEMORRHAGIC FEVER			0	0-0		
V02.4	DIPH.CARRIERS			0	0-1	4	1
032	DIPHTHERIA CASES			0	0-1	1	
123.4	DIPHYLLOBOTHRIUM SPP	4		1	0-4	5	1
008.0	E. COLI-VEROTOXIGENIC	2	10	11	0-37	23	28
054.3	ENCEPHALITIS			0	0-1		
005.9	FOOD POISONING OTHER			0	0-1		
007.1	GIARDIA LAMBLIA	13	13	15	6-24	94	75
320.0	H.INFLUENZAE (CSF)			0	0-0		
041.5	H.INFLUENZAE (OTHER STERILE)		1	0	0-1	1	3
041.59	HAEM. INFLUENZAE (non-B)	1			***	9	1
480.8	HANTA VIRUS			0	0-0		
283.11	HEMOLYTIC UREMIC SYNDROME			0	0-0		
070.1	HEPATITIS A			1	0-4	7	10
070.3	HEPATITIS B			1	0-3	2	3
070.51	HEPATITIS C	23	27	29	19-39	243	245
487.1A	INFLUENZA A****				***	78	88
487.1B	INFLUENZA B				***	44	38
482.83	LEGIONELLA			0	0-1		
085.9	LEISHMANIASIS			0	0-0		
030.9	LEPROSY			0	0-1		
027.0	LISTERIA MONOCYTOGENES	2		0	0-1	4	2
088.81	LYME DISEASE	2		1	0-3	5	
084	MALARIA	1		1	0-3	7	7
055.9	MEASLES			0	0-0		
036.0	MENINGOCOCCAL CSF			0	0-0	2	
036.82	MENINGOCOCCAL ARTHROPATHY				***		
036.2	MENINGOCOCCEMIA BLOOD			0	0-1	2	
B95.6	MRSA	310	303	176	32-320	1531	1648
072.9	MUMPS			1	0-3		5
036.89	N.MENINGITIDIS OTHER		1	0	0-1		5
728.86	NECROTIZING FASCIITIS	4		1	0-4	12	3
729.1	NECROTIZING MYOSITIS				***		
323.9	OTHER ENCEPHALITIS			0	0-1		
033.1	PARAPERTUSSIS				***		
033.0	PERTUSSIS		5	3	0-8	14	23
038.2	PNEUM. SEPTICEMIA	8	3	6	0-12	80	74
073.9	PSITTACOSIS			0	0-0		

* Mean of 15 month totals, from previous, comparable and subsequent months for the past 5 years

** Mean +/- 2 standard deviations of mean

*** Data collected for less than 5 years.

**** Influenza A excludes novel H1N1. There were 10 cases of novel H1N1 in August 2009.

		MONTHLY TOTAL				YEAR-TO-DATE	
ICD9	DISEASE/INFECTION	2008	2009	Expected*	Ex. Range**	2008	2009
083.0	Q FEVER			0	0-0	1	1
056.9	RUBELLA			0	0-0		2
771.0	RUBELLA CONGENTIAL			0	0-0		
041.2	S.PNEUM.OTHER		4	0	0-1	2	8
003.0	SALMONELLA	18	27	16	8-24	177	171
120	SCHISTOSOMIASIS			0	0-1		
004	SHIGELLOSIS	4		1	0-4	17	16
050.9	SMALLPOX				***		
005.0	STAPH FOOD POISON			0	0-0		
785.5	STAPH TOXIC SHOCK				***	2	
481.9	STREP PNEUMONIA - PR			0	0-1	1	
041.1	STREP PYOGENES - OTHER STER	3	11		***	24	66
711.0	STREP.PNEUM.ARTHRITIS			0	0-0		
580.0	STREPT GLOMERULONEPHRITIS			0	0-0		
040.89	STREPT TOXIC SHOCK			0	0-0		1
481	STREPTOCOCCUS PNEUMONIAE			0	0-1	2	
127.2	STRONGYLOIDES			0	0-1	3	5
037	TETANUS			0	0-1		
130.9	TOXOPLASMOSIS			0	0-0		1
124	TRICHINOSIS			0	0-0		
086	TRYPANOSOMA CRUZI			0	0-1		
013	TUBERCULOSIS - NON-RESP.	2	6	2	0-6	13	20
010	TUBERCULOSIS - PRIM.	1	2	1	0-3	4	8
011	TUBERCULOSIS - RESP	10	14	8	2-14	75	85
021.9	TULAREMIA			0	0-1	1	
002.0	TYPHOID			0	0-0	1	1
081.9	TYPHUS			0	0-0		
B96.8	VANCOMYCIN R. ENTEROCOCCI	7	10		***	50	54
005.4	VIBRIO PARAHAEMOLYTICUS				***		
070.59	VIRAL HEP. OTHER				***		
B95.7	VRSA			0	0-0		
062.1	W. EQUINE ENCEPHALITIS			0	0-0		
066.41	WNV NEUROLOGICAL SYNDROME	1			***	2	
008.44	YERSINIA ENTEROCOLITICA	3		2	0-5	5	3
		561	**540**			**3430**	**3585**

* Mean of 15 month totals, from previous, comparable and subsequent months for the past 5 years

** Mean +/- 2 standard deviations of mean

*** Data collected for less than 5 years.

SUMMARY OF COMMUNICABLE DISEASE BY AGE AND GENDER FOR August 2009

		<1		1 - 4		5 - 9		10 - 14		15 - 19		20 - 24		25 - 29		30 - 39		40 - 49		50 - 59		60 - 69		70 - 79		80 +		Missing	Total
ICD9	Disease Name	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	age/gendr	
006.9	AMEBIASIS									1									1										2
005.8	B. CEREUS			1																2									3
038.0	BETA STREP SEPTICEMIA	2										1		1	1		1	3			1	2	1		2	2			17
008.43	CAMPYLOBACTER			5	2	1				1	1	2			1	1	3		1		2		2				1		23
558.2	CLOSTRIDIUM DIFFICILE							1						1		3			6	2	4	5	5	9	3	7	7		53
007.8	CRYPTOSPORIDIOSIS			1					1				1	2															5
008.0	E. COLI 0157			3	1					1	1			1		1	1							1					10
007.1	GIARDIA LAMBLIA	1		2					2	1					1		1	1	1			2	1						13
041.5	H.INFLUENZAE (OTHER STER	1																											1
070.51	HEPATITIS C	1											1	1		2	5	3	4	4	4	1						1	27
B95.6	MRSA	10	2	22	16	20	9	11	9	10	8	12	15	12	10	13	18	15	15	11	11	10	10	11	8	7	8		303
036.89	NEISSERIA MGTS(0ther)										1																		1
033.0	PERTUSSIS	1	2													1											1		5
038.2	PNEUM. SEPTICEMIA													1				1					1						3
003.0	SALMONELLA			1	2	1			1				2	2	2	2	2		2	1	3		2	1	2		1		27
041.1	STREP PYOGENES - OTHER ST									1	1	1	1			1		1	1		2		2						11
041.2	STREP.PNEUM.OTHER			1	1												1				1								4
013	TUBERCULOSIS - NON-RESP.												1		1	1		1	1						1				6
010	TUBERCULOSIS - PRIM.			1		1																							2
011	TUBERCULOSIS - RESP									1	2	1		1		2	1		1		3	1					1		14
B96.8	VANCOMYCIN RES. ENTER.																	1		1	2	1		1	1	1	2		10
		16	4	37	22	23	9	12	13	16	14	17	21	22	16	27	33	26	33	21	33	22	24	23	17	17	21		540

SUMMARY OF COMMUNICABLE DISEASE BY REGION (RHA) FOR August 2009

ICD9	Disease/Infection	Winnipeg	Brandon	N.Eastman		S.Eastman		Interlake		Central		Assiniboine		Parkland		Norman		Burntwood		Churchill	OOP	Missing	TOTAL
*Case Referred to:**				*F*	*P*	*F*	*P*	*F*	*P*	*F*	*P*	*F*	*P*	*F*	*P*	*F*	*P*	*F*	*P*				
006.9	AMEBIASIS	2																					2
005.8	B. CEREUS	1					1								1								3
038.0	BETA STREP SEPTICEMIA	12			1										1		2		1				17
008.43	CAMPYLOBACTER	6					5		3		3		3		2		1						23
558.2	CLOSTRIDIUM DIFFICILE	30	3		1		1		2		4	1	6				2		2		1		53
007.8	CRYPTOSPORIDIOSIS						1		1		1		1				1						5
008.0	E. COLI 0157	7									2		1										10
007.1	GIARDIA LAMBLIA	6					1		1		2		1				1			1			13
041.5	H.INFLUENZAE (OTHER STE																	1					1
070.51	HEPATITIS C	22									3		1		1								27
B95.6	MRSA	97	4	9	1		6	3	6		8		6	1	6	3	11	126	15		1		303
036.89	NEISSERIA MGTS(0ther)	1																					1
033.0	PERTUSSIS	2		1							1								1				5
038.2	PNEUM. SEPTICEMIA	1		1														1					3
003.0	SALMONELLA	10	2				4		1		5			2				2	1				27
041.1	STREP PYOGENES - OTHER ST	6			1								1				2			1			11
041.2	STREP.PNEUM.OTHER	1									1							2					4
013	TUBERCULOSIS - NON-RESP.	5																1					6
010	TUBERCULOSIS - PRIM.																	2					2
011	TUBERCULOSIS - RESP	5	1	1								1					1	5					14
B96.8	VANCOMYCIN RES. ENTER.	7			1				2														10
		221	10	12	5		19	3	16		30	2	20	3	11	3	21	140	20	2	2		540

* F=Federal Jurisdiction (First Nations and Inuit Health) P=Provincial Jurisdiction OOP=Out of Province

STD Infection Summary Report - August 2009

	MONTHLY TOTAL		YEAR-TO-DATE	
DISEASE/INFECTION	**2008**	**2009**	**2008**	**2009**
All Chlamydia Infections	537	467	4597	4301
All Gonorrhea Infections (including PRNG)	102	83	983	753
All Syphilis Infections	4	3	31	33
Gonorrhea & Chlamydia Co-infections	40	36	436	317
HIV	7	11	62	78

Total Number of STD Cases by Age and Gender - August 2009

	<1		1 - 4		5 - 9		10 - 14		15 - 19		20 - 24		25 - 29		30 - 39		40 - 49		50 - 59		60 - 69		70 - 79		80 +		Missing	Total
Disease Name	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	age/gendr	
Chlamydia Only Cases							4		110	43	88	52	36	34	24	19	8	10	1	2								431
Gonorrhea Only Cases			1						7	2	7	9	6	5	4	1		2	1		1	1						47
Syphilis Only Cases																		3										3
GC and CT Cases							4		7	2	7	5		2	4	5												36
			1				8		124	47	102	66	42	41	32	25	8	15	2	2	1	1						517
HIV														1		2	1	3		2	1		1					11

Regional STD Distribution - August 2009

Disease/Infection	**Winnipeg**	**Brandon**	**N.Eastman**		**S.Eastman**		**Interlake**		**Central**		**Assiniboine**		**Parkland**		**Norman**		**Burntwood**		**Churchill**	**OOP**	**Missing**	**TOTAL**
Case Referred to:*			*F*	*P*	*F*	*P*	*F*	*P*	*F*	*P*	*F*	*P*	*F*	*P*	*F*	*P*	*F*	*P*				
All Chlamydia Infections	225	24	20	8		10	7	12		23		15	2	6	4	34	43	27	2	5		467
All Gonorrhea Infections	33	1	4	2			1	2		2		1			3	13	12	9				83
All Syphilis Infections	1	1																			1	3
GC and CT Infections	10	1	1	2				1		1		1			1	7	4	7				36

* F=Federal Jurisdiction (includes First Nations and Inuit Health) P=Provincial Jurisdiction OOP=Out of Province